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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,413	09/20/2006	Mario Manzone	09952.0007	3701

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VENABLE LLP  
P.O. BOX 34385  
WASHINGTON, DC 20043-9998

EXAMINER
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ZIMMERMANN, JOHN P

ART UNIT	PAPER NUMBER
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2861

MAIL DATE	DELIVERY MODE
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02/20/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/553,413	<b>Applicant(s)</b> MANZONE ET AL.	
	<b>Examiner</b> JOHN P. ZIMMERMANN	<b>Art Unit</b> 2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on 17 October 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 12-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☒ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20 September 2006</u> .                                       | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Priority*

1. Acknowledgment is made of applicant's claim for foreign priority based on PCT/IT04/00192 filed on 08 April 2004 and further on TO2003A000303 filed on 17 April 2003. It is noted, however, that an appropriate certified copy of the Italian application as required by 35 U.S.C. 119(b) has either not been received or at the least has not been placed in the file. Examiner respectfully requests Applicant to provide a certified copy of TO2003A000303 in an effort further prosecution of the application.

### *Double Patenting*

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. **Claims 12-15** are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over **claims 1, 3, & 5-7 of U.S. Patent No. 7,273,273 B2**.

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Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application overlap said patented claims and would be obvious thereby.

In the above reference, it is the examiner's position that it would have been obvious to one having ordinary skill in the art that a container for storing and refilling an ink cartridge could have repeated communication devices and collection chambers for cartridges that contain a variety of inks.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

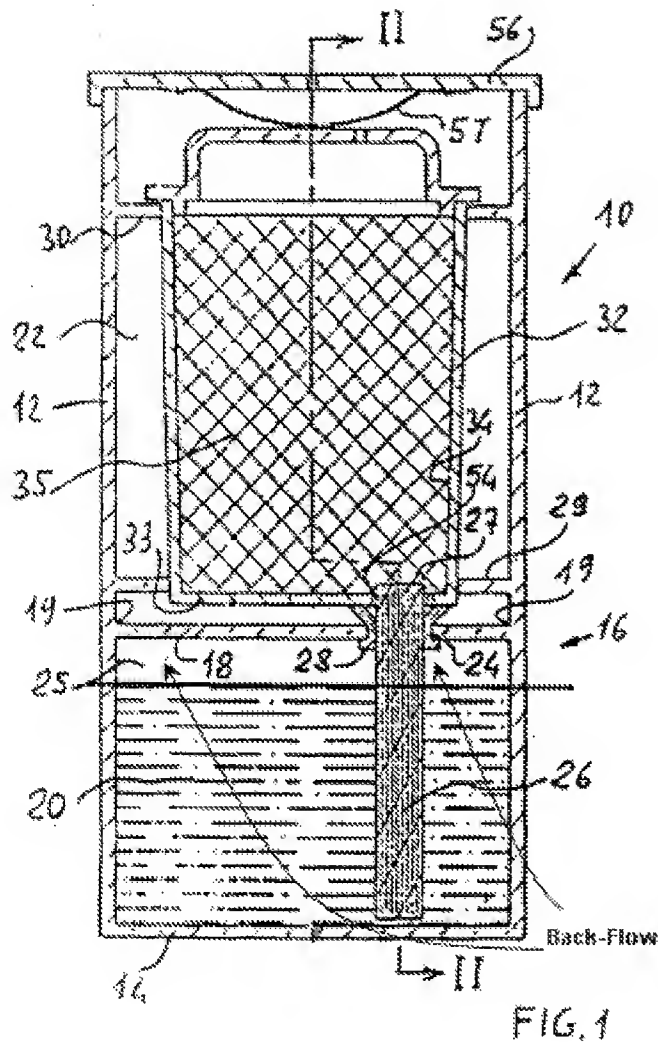
6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

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evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. **Claims 12-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Scardovi et al.**, (EP 0605183 A2) and **da Silva** (US 6,766,817 B2) in further view of **Hetzer et al.**, (US 4,614,163 A).

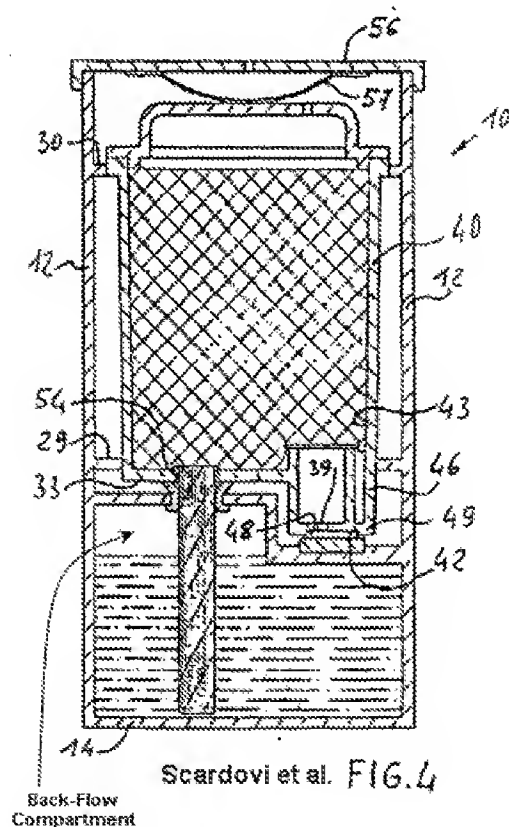
a. As related to independent **claim 12**, Scardovi et al. teach a station [i.e. container] for storing and refilling with ink a cartridge of a printhead, including a container with a collection chamber [i.e. ink container] containing a predetermined quantity of ink for refilling completely said cartridge a plurality of times, said collection chamber being arranged adjacently to a bottom wall of said container, said bottom wall serving as a support platform or said container on a horizontal plane so as to define a vertical operating position of said station, said container having an external shape defining at least one side wall of said container and also being provided with a housing attached to a top wall of said container and suitable for accommodating said cartridge and a refilling means [i.e. capillary element] at least partially immersed in said predetermined quantity of ink when said station is arranged in said vertical operating position, and suitable for cooperating with said cartridge for transferring said ink from said collection chamber to said cartridge (Scardovi et al. – Detailed Description, Column 3, Lines 14-45 and Figure 1, Reference #10, #25, & #26, shown below).

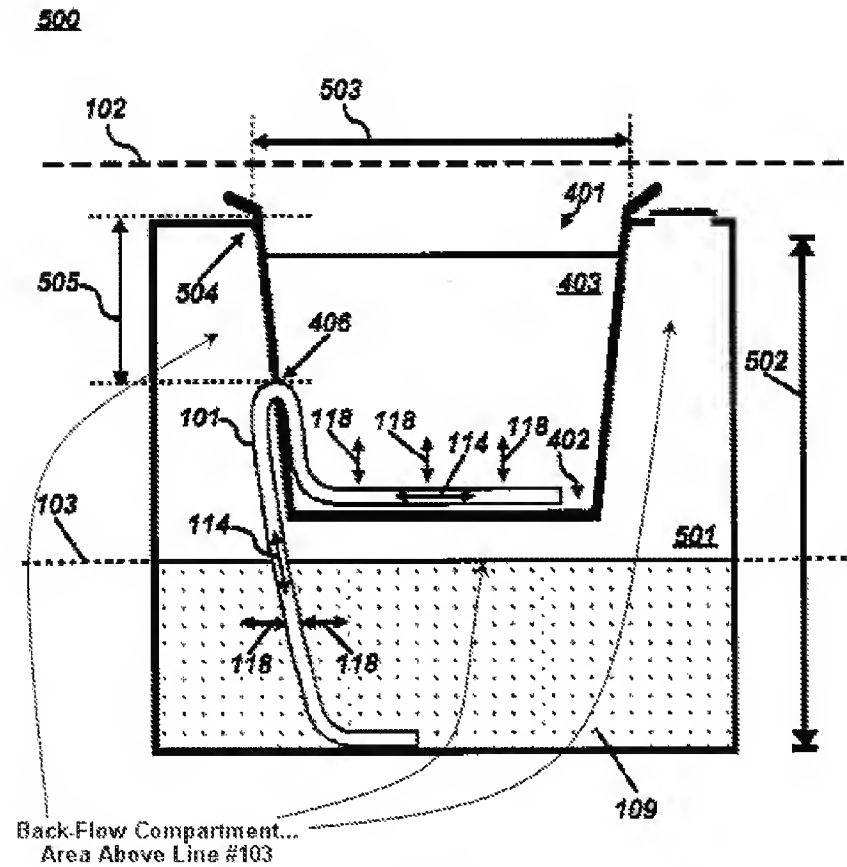


b. Continuing with **claim 12**, while Scardovi et al. teach a back-flow compartment (Scardovi et al. – Figure 1, Reference #25 & Arrows, shown above and Figure 4, Reference Arrows, shown below), Scardovi et al. **do not** specifically teach the back-flow compartment surrounds the housing. **However**, da Silva teaches a fluid conduction means with a station for storing and refilling a fluid container with a container and a refilling means as well as a back-flow compartment that surrounds the housing and communicates freely with said collection chamber for receiving the ink contained in said

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collection chamber when said station is turned on from said vertical operating position, said back-flow compartment and said collection chamber having their respective volumes proportionate in such a way that, when said station is tilted from said vertical operating position and placed along any side wall of said container in a tilted position on said horizontal plane or when said station is turned upside down with respect to said vertical operating position, said predetermined quantity of ink flows back from said collection chamber to said back-flow compartment, whereby said refilling means emerges from said ink and any leakage of ink through said refilling means is avoided (da Silva – Title; Abstract; and Figure 5, Reference #109, #101, #103, #403, #502, & Arrows, shown below).



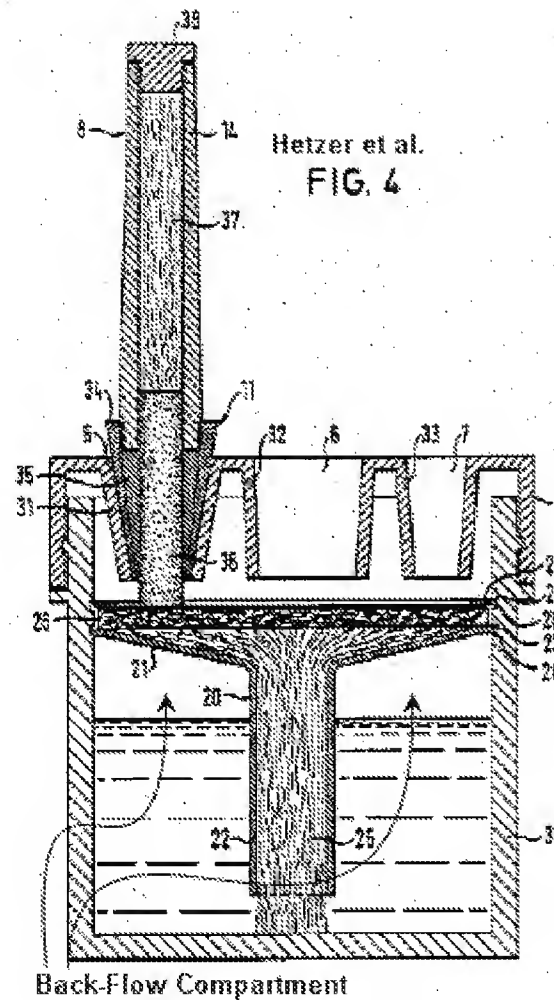
da Silva  
FIG. 5

c. Additionally, while da Silva clearly teaches the back-flow compartment as currently claimed, the specific use of the invention in this environment is not detailed very thoroughly. **However**, Hetzer et al. precisely teach the motivation to combine the prior art as the station [i.e. ink pot] for storing and refilling an ink cartridge [i.e. felt pens] includes the above taught components to include the container, the refilling means, and a back-flow compartment surrounding the housing and teaches the motivation is to realize an apparatus thereof in which direct spilling of the ink is not possible under any



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circumstances (Hetzer et al. – Description, Column 3, Lines 15-17 and Figure 4, Reference #3, #25, and Arrows, shown below).



d. As related to dependent **claim 13**, the combination of Scardovi et al., da Silva, and Hetzer et al. teach the limitations of **claim 12** for the reasons above and continues to teach the back-flow compartment has a volume at least equal to the volume of the predetermined quantity of ink (da Silva – Detailed Description, Column 14, Line 35 – Column 15, Line 12 and Figure 5, Reference Arrows, shown above).

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e. As related to dependent **claim 14**, the combination of Scardovi et al., da Silva, and Hetzer et al. teach the limitations of **claim 12** for the reasons above and continues to teach the refilling means is disposed in a central position with respect to the bottom wall and symmetrical with respect to the side walls of the container (Hetzer et al. – Figure 4, Reference #3 & #25, shown above).

f. As related to dependent **claim 15**, the combination of Scardovi et al., da Silva, and Hetzer et al. teach the limitations of **claim 12** for the reasons above and continues to teach a refilling means comprises an elongated capillary element [i.e. porous element] passing through a bottom wall of said housing and having a lower end facing said bottom wall and an upper end suitable for being inserted in said cartridge for transferring said ink through capillary from said container to said cartridge (Scardovi et al. – Detailed Description, Column 4, Lines 21-40 and Figure 1, Reference #26, #27, #33, & #54, shown above).

g. As related to further dependent **claim 16**, the combination of Scardovi et al., da Silva, and Hetzer et al. teach the limitations of **claim 15** for the reasons above and continues to teach the capillary element is inserted in an impermeable, tube-like element [i.e. suction tube] attached to said housing and extending in said collection chamber perpendicularly to said bottom wall, said tube-like element also being disposed in a position that is central with respect to said bottom wall and symmetrical with respect to the side walls of said container, so that said capillary element is not covered by said ink when said container is tilted laterally or turned upside down (Hetzer et al. – Description,

Column 2, Lines 42-56 & Column 3, Lines 4-17 and Figure 4, Reference #20 & #22, shown above).

h. As related to further dependent **claim 17**, the combination of Scardovi et al., da Silva, and Hetzer et al. teach the limitations of **claim 16** for the reasons above and continues to teach the tube-like element consists of a rigid pipe attached to the bottom wall of the housing (Hetzer et al. – Description, Column 2, Lines 42-56 & Column 3, Lines 4-17 and Figure 4, Reference #20 & #22, shown above and Scardovi et al. - Detailed Description, Column 3, Lines 14-45 and Figure 1, Reference #18, #24, & #28, shown above).

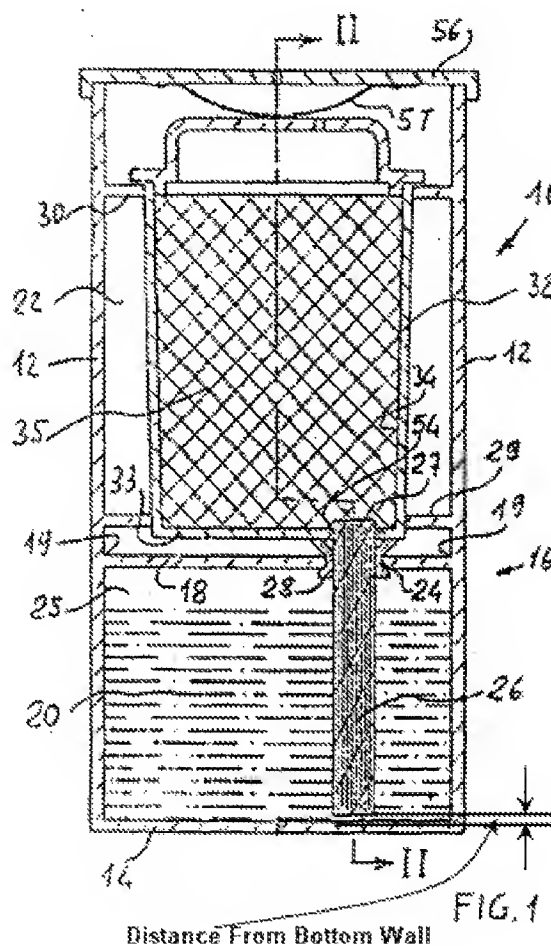
i. As related to further dependent **claim 18**, the combination of Scardovi et al., da Silva, and Hetzer et al. teach the limitations of **claim 16** for the reasons above and continues to teach the tube-like element consists of a rigid and impermeable sheath attached tightly to the bottom wall. (Hetzer et al. – Description, Column 2, Lines 42-56 & Column 3, Lines 4-17 and Figure 4, Reference #20 & #22, shown above and Scardovi et al. - Detailed Description, Column 3, Lines 14-45 and Figure 1, Reference #18, #24, & #28, shown above).

8. **Claims 19-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Scardovi et al.**, (EP 0605183 A2) **da Silva** (US 6,766,817 B2) and **Hetzer et al.**, (US 4,614,163 A) as applied to **claims 12 & 15** above and further in view of **Ando et al.**, (US 6,048,054 A) and **Dressel** (US 2,620,499 A).

a. As related to further dependent **claim 19**, the combination of Scardovi et al., da Silva, and Hetzer et al. teach the limitations of **claim 15** for the reasons above and

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continues to teach the lower end of the capillary element is placed at a distance from the bottom wall (Scardovi et al. - Detailed Description, Column 3, Lines 14-45 and Figure 1, Reference #14, #26, & Arrows, shown below).

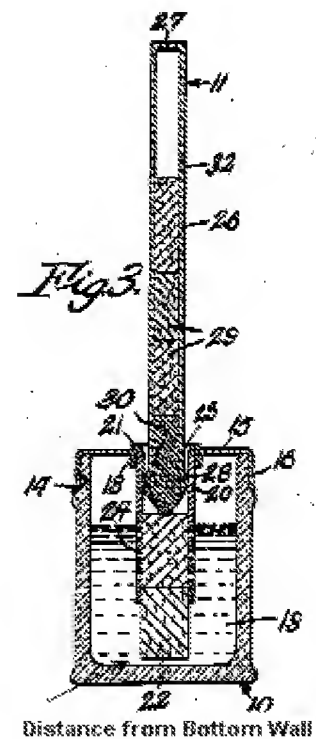
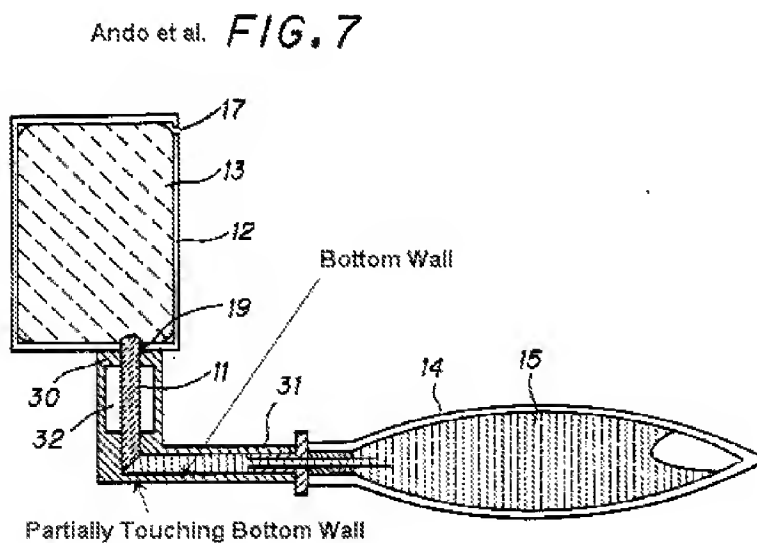


b. Continuing with **claim 19**, the combination *does not* specifically teach a distance of not more than about 5 cm the capillary element is placed from the bottom wall.

*However*, as the additional prior art of record shows, specifically Ando et al. & Dressel, the capillary element in such an apparatus could be placed at any distance from the bottom wall to include touching the bottom wall, partially touching the bottom wall, or

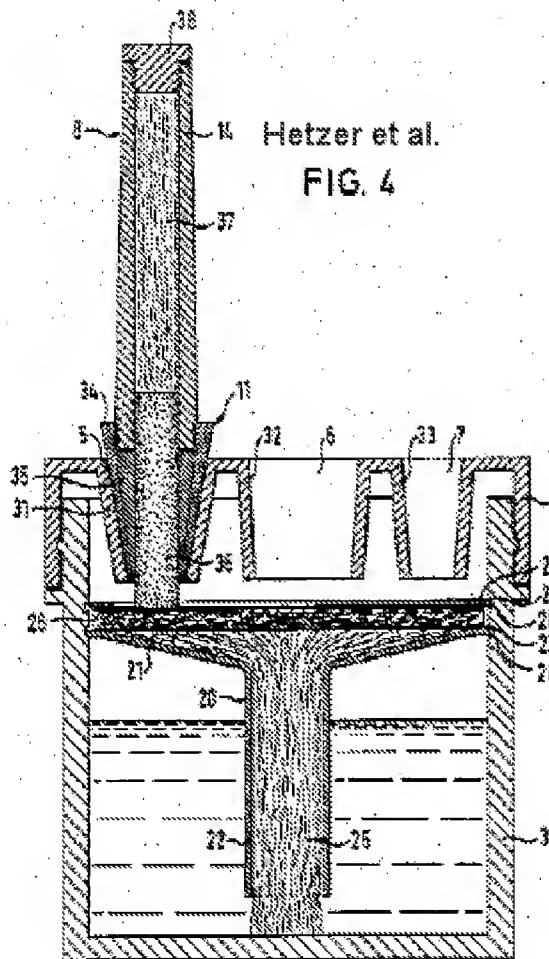
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distancing itself from the bottom wall. It would have been obvious to one of ordinary skill in the art at the time the invention was made to adjust the distance the capillary element was placed from the bottom wall as would be most efficient, cost effective, and/or the best mode of the invention. Additionally, a distance of not more than about 5 cm would encompass range of 0 – 5.4 cm thereby reinforcing the teachings of the prior art (Ando et al. – Description, Column 9, Lines 14-43 and Figure 7, Reference #11 & Arrows, shown below & Dressel – Description, Column 4, Lines 35-60 and Figure 3, Reference #22, #10, & Arrows, shown below).



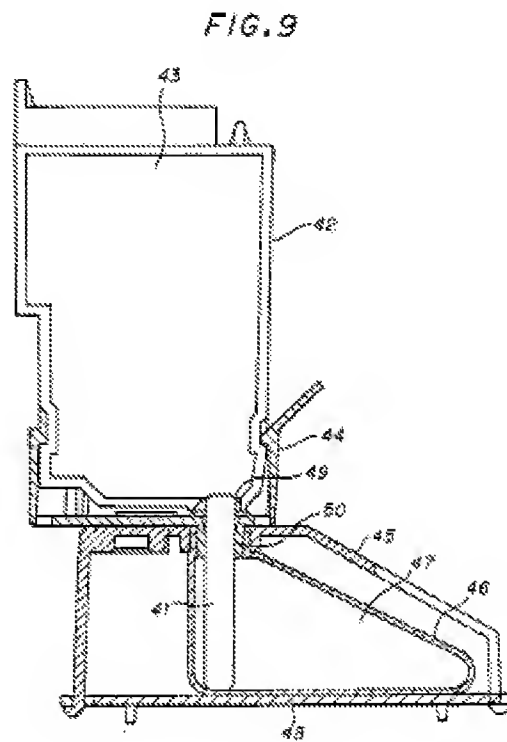
c. As related to dependent **claim 20**, the combination of Scardovi et al., da Silva, and Hetzer et al. teach the limitations of **claim 12** for the reasons above and continues to teach the container includes a compensating device [i.e. holder ring] attached against a

boss of the bottom wall of the housing (Hetzer et al. – Description, Column 2, Lines 42-65 and Figure 4, Reference #26 & #27, shown below).



d. Continuing with **claim 20**, the combination *does not* specifically teach a lamina valve, However, both Ando et al. and Dressel teach a compensating device for balancing differences in hydrostatic pressure between the collection chamber and the cartridge, including a lamina valve [i.e. annular bead, flange or relay portion] attached against a boss of the housing, the lamina comprising a flexible portion suitable for elastically assuming one or the other of two positions at opposite ends with respect to a rest position,

when said lamina is urged by the difference in hydrostatic pressure between the cartridge and the collection chamber or vice versa (Ando et al. – Description, Column 9, Lines 14-43 and Figure 9, Reference #49 & #42, shown below & Dressel – Description, Column 2, Lines 15-17 and Figure 3, Reference #21, shown previously).



Given the same field of endeavor, specifically a station for storing and refilling an ink printing device, it is apparent that one of ordinary skill in the art at the time the invention was made would have been motivated to combine station with a container, a refilling means with a capillary element and a tube, a valve and a backflow compartment as taught by the combination of Scardovi et al., da Silva, and Hetzer et al. with the station for storing and refilling an ink printing device with a specific lamina valve as taught by both Ando et al. and Dressel, in an effort to ensure appropriate replenishing of ink while avoiding leakage or spillage (Ando et al. – Summary, Column 1, Lines 53-57 and Dressel – Description, Column 1, Lines 15-18).

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rhoades (US 2,737,927 A) teaches a station for storing and refilling an ink application device with a container containing ink, a capillary refilling device, and a back-flow compartment.

10. ***Examiner's Note:*** Examiner has cited particular Figures & Reference Numbers, Columns, Paragraphs and Line Numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

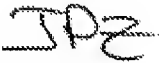
Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN P. ZIMMERMANN whose telephone number is (571)270-3049. The examiner can normally be reached on Monday - Thursday, 7:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Luu can be reached on 571-272-7663. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, consisting of the letters 'JPZ' in a stylized, cursive-like font.

JPZ

/LUU MATTHEW/

Supervisory Patent Examiner, Art Unit 2861